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Iraq, Cradle of Civilization and Medicals International's New Frontier..



It is with great pleasure and privilege that I open this newsletter announcing officially the launching of our full operation in the great land of Iraq.

Iraq the land of Mesopotamia situated between the great rivers of Tigris & Euphrates; the land of the first recorded history whose civilizations date back to the 6th millennium BC running from the Akkadian through the great era of the Abbasid Arabic Islamic Empire until the Ottoman Empire few hundred years back; Iraq the birth place of writing, law, and the wheel. **It is truly a privilege to be able as a company to service this great civilization and its ancient history.**

On January 1st, 2012, we launched our first base office in Erbil, in the Kurdistan Province, located in northern Iraq.

Our next steps include two more operational bases, a central one in Baghdad and another

in the southern city of Basra. Our very focus in Iraq is on education as the basis of our investment in this great nation. We will be heavily investing in bringing about a new approach for business and one that is based on true added value summed up in a true professional commitment to education & skill transfer.

I wish to take this opportunity to thank our establishing team members in Iraq and to applaud their great efforts in making this start up a memorable one. I would like to extend my commitment to our valuable suppliers who are working side by side with us to ensure that we have a successful beginning, and I surely cannot close before extending a sincere appreciation of the many new clients and partners who are already entrusting us with their valuable business and making our start such an encouraging one.

Thank you all and looking forward to seeing you in Iraq.

Your colleague, partner and friend,

*Walid G. Barake
President and Founder*

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Biomedics Toric...excellent visual acuity and lasting comfort!

In the last two decades, improvements in lens design have made toric soft lenses a popular prescribing option for astigmatic patients. New manufacturing techniques have brought improvements in production and have made toric soft lens fitting very simple and easy.

In the past, fitting of contact lenses was time consuming and vision appeared to be normal in the consulting room, but some patients were complaining of variable vision and some discomfort while driving and watching T.V.

In our practice we are using Biomedics Toric lenses. We have myopic, astigmatic, and hyperopic astigmatic patients, 90% of whom are very happy and satisfied with their toric lenses. They are achieving optimum visual acuity and stable and reliable fitting with minimum chair time. The Biomedics Toric lenses have unique thickness at the periphery, the lid interaction with the lens is very minimal, and they offer greater comfort than other lenses. The lenses have an added advantage of giving UV protection.

In terms of handling, comfort, visual clarity, and corneal health, I believe that Biomedics Toric lenses are the right option to suggest to all astigmatic patients.

Rakesh Khera
Optometrist
Optic Center, Kuwait



BIOMEDICS Toric:
Preferred by Practitioners²;
Preferred by Patients³.

²Campbell et al, Contact Lens Spectrum, June 2002
³Whittaker, Optician, September 2002



Fitting Of Challenging Corneas with Special Design Of RGP Lens

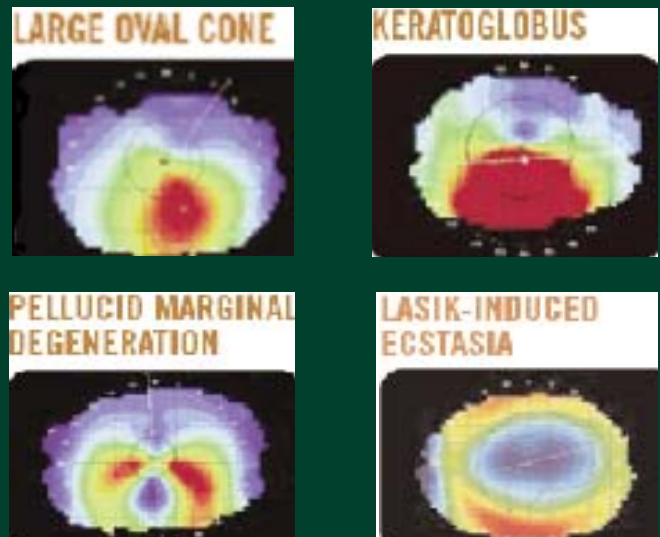
Background: The purpose of the work is to study the safety and efficacy of a new design of rigid gas permeable (RGP) lens, namely Rose K irregular cornea (IC) (David Thomas, Northampton, UK) in management of challenging corneas with high degree of irregular astigmatism.

Methods: The study was conducted on 66 eyes of 40 patients with irregular astigmatism. The selection criterion was to obtain a sample population with irregular astigmatism that was unlikely to be corrected with spectacles or conventional contact lens. A complete ophthalmologic exploration, which included topography, was made. All eyes were fitted with Rose K IC after measuring precisely lens parameters according to a special trial set of this design. Refraction, visual acuity before and after fitting, maximum wearing time per day, contact lens related problems, and patient satisfaction were analyzed.

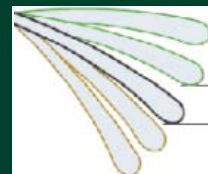
Results: The studied eyes included eyes with high degree of irregular astigmatism due to keratoconus (oval and globus type) in 42 eyes (63.6%), corneal injuries in 6 eyes (9.1%), pellucid marginal degeneration (PMD) in 12 eyes (18.2%), and post Lasik ectasia in 6 eyes (9.1%). After fitting of the eyes with Rose K IC lens, there was a significant improvement in the visual acuity (VA) in all fitted eyes ($p < 0.001$), with 97% of the patients gaining more than 3 lines after fitting with the lenses. Study of spherical and astigmatic errors also showed a highly significant improvement ($p < 0.001$). Statistical analysis of the subjective responses indicated a strong acceptance of the lens by all subjects.

Conclusion: Rose K IC proved to be effective in correcting high degree of corneal astigmatism caused by a variable number of challenging corneal conditions with high visual performance and good patient comfort.

Dr. Waleed Abou Samra
FICO, MD



Rose K2 IC



Rose K IC has 5 different edge lift values to fit all patients

Rose K2 Nipple Cone: Beating the Peaks

Nipple cones normally affect a central corneal area of ≤ 5 mm in diameter. The cone apex is usually centrally to para-centrally located, slightly displaced infero-nasally, and is characterized by having a very steep curvature. The huge change in corneal curvature between the cone apex and the peripheral cornea generates an excessive strangeness making contact lens fitting a very challenging task for any contact lens practitioner. Nipple cone fittings commonly show a very steep edge lift, resulting in discomfort to the patient and leading to changes in the fitted lens – normally flattening the edge lift. However, quantifying how much the edge lift needs to be flattened by looking at the fluorescein pattern and other characteristics of the fitting can take years to learn.

Despite the marvelous success of the Rose K brand of lenses, Dr. Paul Rose continues his research for better lens designs to improve what is already thought to be unbeatable. Fruit of his labor has emerged to be the new K2 NC (Nipple Cone) design, specifically designed for easy and successful fitting of nipple cones.

Dr. Paul Rose has designed a new lens geometry named **Rose K2 NC**, to make nipple cones easy to fit. Its main characteristics are:

- A small and aspheric back optical zone diameter, which reduces with decreasing back optic zone radius (BOZR)
- A very rapid peripheral flattening outside the back optic zone
- A design of the front OZ which is larger compared to the back OZ, providing a larger optical area for better vision
- A range of edge lift options to precisely control the peripheral fit
- Aberration control optics on the front surface of the lens

Clinical study

After completion of the Rose K2 NC lens design, an international clinical study was undertaken to evaluate the clinical response before the lens was launched into the market, worldwide. Each practitioner was provided with a trial set consisting of 25 lenses in 8.30mm diameter and base curves between 7.40 and 4.60mm. As with the rest of Rose K2 trial sets, the new Rose K2 NC included contact lens power changes as a function of back optic zone radius in order for the lens to provide refraction as close as possible to the patients' ocular refraction. Each practitioner had to fit a minimum and a maximum of 5 and 10 eyes, respectively.

In total, 120 eyes were fitted in the study. Eighteen eyes could not be fitted successfully for the reasons described in Table 1. No adverse events or lens stability problems were found in any case. The mean number of lenses per eye needed to obtain a successful fit was 1.3, which represents a success with the first lens of 86%, in line with the high fitting success rate reported with standard Rose K2 lenses, worldwide. In 85 contact lens wearing eyes, visual quality was compared between the patients' habitual lenses vs. the new Rose K2 NC lenses. Of these, 7 eyes reported worse (8%), 28 the same (33%), and 50 better (59%) vision with the new Rose K2 NC, in comparison to their habitual lenses. Additionally, although this was not required in the study protocol, the results can be summarized by observing Figures 1 and 2. Both lenses were fitted in the same eye and have the same back optic zone radius of 6.9mm. It is clearly noticed that better lens fitting and edge lift can be achieved with the new Rose K NC, in comparison with the standard Rose K2.

All 13 professionals who participated in the study manifested a strong interest to continue fitting this new and exciting lens. Furthermore, eye care practitioners reported that they would choose the Rose K NC as a first choice in 85% of the individual fits performed in this trial.

The contact lens fitting in keratoconus, other corneal ectasias, and irregular corneas can be a challenging task to any eye care professional. However, the Rose K2 family of lenses allows easy, simple, and systematic contact lens fitting on the above mentioned corneal conditions. In fact, following the manufacturer fitting guidelines, a successful fit can be achieved in about 90% of the cases. Now, with the new Rose K2 NC the fitting of nipple cones has become easier than ever.

REFERENCES

1. Miguel Romero Jiménez - *DOO, MSc*
2. Dr Jacinto Santodomingo - *PhD, MSc, OD, MCOptom, FBCLA, FFAO - Menicon Co., Ltd*

Fitting Problem	Number of Eyes
Cones without Nipple shape	4
Standard Rose K2 lens preferred	2
Wettability problems	3
Discomfort	2
Insufficient edge lift with +2.5 over standard	1
Scleral lens required	1
Better VA with Standard Rose K2	1
Dry eye sensation	2
Rose K2 IC preferred	1
Rose K PG preferred	1

Table No. 1 Reasons for unsuccessful fits



Figure 1:
Rose K2



Figure 2:
Rose K2 NC



Hani Attieh
Territory Manager, CL
MI- Beirut

Intacs SK And Irregular Astigmatism

"I am born again!", these were the words of a 26 year old male who underwent a bilateral Intacs surgery. He began to have a slow progressive visual loss since the age of 16, making his life more and more difficult, from work duties to normal life habits.

Intacs SK are FDA approved PMMA inserts. They have an elliptical shape to preserve the surrounding tissue and prevent light scattering. They are designed to be implanted at 6 mm from the central optic zone to create a central flattening of the cornea and to slow or stop the progression of the cone, correcting refractive errors and increasing BSCVA.

Pre-op: The patient had a binocular BCVA of 3/10.

Method: Both eyes had clear central corneas and pachymetry above 550 microns at 6 mm. Surgery was done manually and a 10 day period separated between the surgeries in each eye. The right eye was treated with 350 SK symmetrical Intacs ring at 90 degrees (the topography steep axis), considering that it is a centered cone. The left eye was treated with one single intacs 300 SK at 45 degrees.

Results: One month post-op, both eyes had well centered rings with a depth around 70%, and free from any complication or inflammation due to the surgery.

Six months post-op, the topography of OD shows the spreading of the steepening over the steep axis that created a regular correctable astigmatism. OD: plano -4 @ 20, even though the astigmatism increased, it can be now corrected by spectacles, the UCVA is now 5/10 and BSCVA is 9/10. As for OS, it achieved an amazing UCVA of 10/10.

Conclusion: Intacs is a safe and reliable technology for the treatment of keratoconus. This case showed the Intacs' excellent effect on treating corneas with irregular astigmatism.

This patient was really born again when improving his binocular vision from 3/10 to 10/10.

Galilei (Ziemer) topographies of both OD and OS eyes

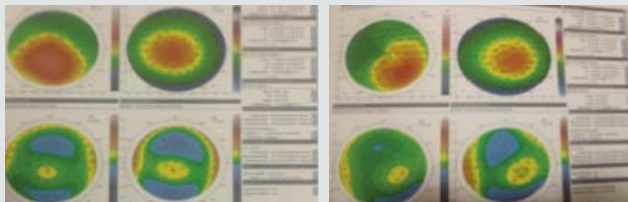


Figure 1:
Pre-op OD: -2 -2 @ 75
(BCVA 1/10)

Figure 2:
Pre-op OS: plano -1.5 @135
(BCVA 3/10)

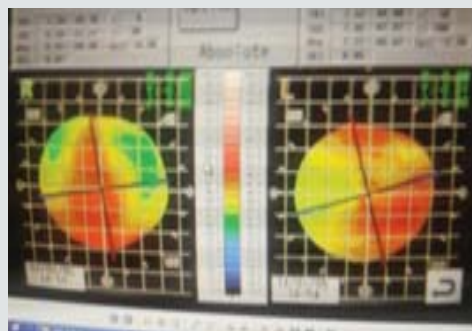
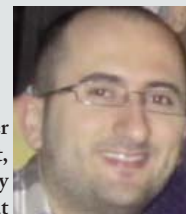


Figure 3:
Post-op results

Marc Nasser
Clinical Application Specialist,
Ophthalmology
MI-Beirut



KALIMERA, KALISPERA, and KALINIHTA...

It was on October 5th of last year when we received an email announcing that our quarter 3 sales meeting would be held in Cyprus. Fifteen days later, WE- the sales territory managers of the four departments- arrived in Limassol on a cold Thursday night. We were warmly welcomed when we arrived at the hotel, close to midnight. As everyone sorted themselves out in separate rooms, some of us managed to sneak out to the hotel's terrace and enjoy a lovely breeze with an amazing view of still water. It was then decided to go out for a quick exploratory walk in the streets of Limassol and grab a bite as everyone was starving..Kebabs worked their wonders, yet by 8 o'clock the next day we were all gathered in the lobby ready to have our international breakfast. An hour later, our training began...

We were introduced to our lovely trainer Aspacia, who throughout the entire day was guiding us with great advice on how to enhance our sales' performance, develop our sales calls and boost our relationships with our clients. She made it an enjoyable workshop having everyone interact with little games, quizzes and role plays. After the workshop we were all invited for dinner at one of Cyprus's traditional restaurants. The place was warm and cozy, we were all comfortable enjoying the Cyprians traditional meal the "MEZZE", a very similar concept to our Lebanese "MEZA". The next day was a full day of sales meeting interrupted with a relaxing lunch at the terrace before a peaceful shore taking pleasure in the shiny sun and the blue horizon. After the long day, we had dinner at a Mexican bistro and explored limassol's night life. Sunday came, but my colleagues and I were hoping it was still Friday... By 1 o'clock in the afternoon all our luggage were checked out. We went into the city, walked through the old markets and had the yummiest street barbequed corn cobs. Our

farewell was at a café after which we made our way to the airport heading back to the Lebanese grounds.

It was an exciting experience with a bunch of great characters which made the whole trip worth the while. We thank Aspacia for the time shared with us and most of all thank MI for offering us this opportunity.



Hibbah Shami
Jr. Territory Manager, CL
MI-Beirut



Dr. Shama's Experience With Tomey's Devices

Three years after the relaunching of Tomey devices in Egypt, MI succeeded in positioning Tomey as one of the most prestigious and elegant diagnostic devices in the market. Passing the right message to our customers was the key to gain positive market share in one of the most highly competitive markets in the region.

In our continuous efforts to collect opinions about our products from key doctors, we had a meeting with **Professor Ahmed Shama**, from Alexandria University, to share his experience with Tomey devices. Doctor Ahmed stated that he always searches for products equipped with the most advanced technology coupled with an easy to operate interface, and that is exactly what he found in Tomey devices.

When he put a plan to equip his new clinic, he was positively impressed by the smart features found in Tomey devices. The patient unit has a smart design with a small foot print that can give the chance to benefit from the clinic's space, as it can be installed with CW or CCW swiveling so it can be placed in any corner. It is also the best fit for overweight patients as it does not have an electrical lock for the device tray; instead, it includes a magnetic resistance so you can fix the tray at different distances, according to the needed space. The panoramic light gives a charming look for the unit in the dark and easily guides the doctor to the unit's buttons while investigating a patient. The combination of the refracto keratometer and the automated phoropter helps Dr. Ahmed to get patients' BCVA in a shorter time. The Autoref. has a touch screen with autoshot facility that transfers the data to the phoropter and enables him to print the final prescription of the patient with the phoropter printer.



"It is really fantastic when you fall in love with your clinic and you look at each part of it as a piece of art", Dr. Shama declares.



Ahmed Tabaga
Sales Manager & Regional Manager Product
Development, Ophthalmology
MI-Cairo

New Scenario for Keratoconus Management

"Toric Phakic Intraocular Lenses Combined With Cross Linking"

Refractive surgical correction of ametropia in patients with keratoconus remains challenging. Progressive thinning and subsequent anterior bulging of the cornea can lead to severe astigmatism that is often accompanied by myopia and central scarring, resulting in mild to marked impairment in the quantity and quality of vision. Spectacles and contact lenses are the usual optical treatment in the early stages of keratoconus.

Often, patients with keratoconus are young with a transparent cornea; therefore, less invasive surgical options to delay the need for PKP must be considered.

Intrastromal corneal ring segments (ICRS) are widely used in keratoconus patients to reinforce the corneal structure and reduce astigmatism. However, spherical refractive errors and residual astigmatism may remain uncorrected. Collagen crosslinking using riboflavin and ultraviolet (UV) light was recently introduced; however, despite initial promising results, more research is needed to determine the long-term safety and efficacy.

There are recent reports of the effective use of anterior posterior chamber phakic intraocular lenses (pIOLs) alone or combined with other surgical procedures to correct refractive errors associated with keratoconus.

We presented a series of patients with early-stage keratoconus who had implantation of a toric posterior chamber pIOL to correct myopic astigmatism after cross linking implantation.

We believe this is the first study of simultaneous correction of sphere and cylinder with a toric pIOL in a significant number of eyes with keratoconus.

A study comprised of 18 consecutive keratoconic eyes of 9 patients with stage I to III keratoconus were analyzed after the implantation of collagen copolymer posterior chamber phakic intraocular lens (pIOL). After 12 month of cross linking applications to stabilize the cone, the main outcome measures of uncorrected (UDVA) and corrected (CDVA) distance visual acuities, refraction, and postoperative complications were evaluated 1, 3, 6, and 12 months, postoperatively. Stability of the cones was utilized by the initial cross linking and depression of the keratometry was identified.

Preoperatively, the mean spherical equivalent in the 18 eyes (9 patients) was -10.13 diopters (D) (range -3.5 to -14.5 D) and the mean cylinder, -3.67 D. (range -1.75 to -6.00 D). The uncorrected visual acuity was 20/40 or better in all cases and 60 % 20/22 or better. At 12 months, mean postoperative spherical equivalent was +0.36 D, mean cylinder of -0.93 D. No eyes lost more than 2 lines of CDVA; 29 eyes (96.7%) maintained or gained 1 or more lines. The efficacy index was 1.07 and the safety index, 1.16. There were no complications or adverse events.

In conclusion, these results confirm combined cross linking and toric implantable collamer lenses (toric ICL™, STAAR Surgical) is a predictable and effective procedure for the correction keratoconus.



Dr. Ahmed M. EL-Moatassem Kotb, MD.,
PhD., FRCSEd.
International Medical Center- Dubai

Scar Treatment Using Cutera

Scars are marks created during the healing of damaged skin or tissues. It is a manifestation of the skin's healing process. After the skin or tissue is wounded, the body releases collagen to mend the damage. Collagen reattaches the damaged skin. As the wound heals, a temporary crust forms and covers it. The crust is a scab that protects the damaged area.

A scar usually appears red, because blood vessels are created while the body forms scar tissue. Causes of scars include cuts, sores, surgery, and burns. Severe acne and chicken pox may also scar skin.

Scar formation is a natural part of the healing process. A scar forms from excess amounts of collagen in the wound as the body attempts a repair. However, the area is far from healed. Depending upon the size, depth and location of the injury, it can take months to years for the skin to return to its normal strength. Some scars heal naturally while others require additional treatment. Laser treatments remove scarred tissue and stimulate the growth of collagen. Treatment of scars presents a major challenge.

Cutera offers two types of laser treatments: Ablative and Non-Ablative

For the non-ablative treatment, we have the **Laser Genesis** or the newest head **Laser Genesis Plus** with an LED for skin temperature and a Beam diameter. Laser Genesis has an Nd:Yag 1064 nm wavelength, a patent technology for Cutera, a high-power microsecond pulse technology with high repetition rate so it can safely heat the papillary and reticular dermis, stimulating collagen and reducing microvascular redness. This is a year round procedure with minimal discomfort and no downtime.

On the other hand, Cutera provides an ablative treatment with a patent wavelength 2790nm YSGG Yttrium Scandium Gallium Garnet, that produces an ablation coagulation and residual heating. It offers best results in a maximum of 2 sessions and less downtime.

Pearl, is thermal process for resurfacing of the epidermis. **Pearl Fractional** delivers 300 µm diameter micro-columns that penetrate from 300 to 1500 µm with 40–60 µm of residual thermal damage (RTD). During this process we rejuvenate the skin and produce new collagen eliminating scarred tissue by vaporizing it and increasing collagen growth.

“Combining both Pearl and Pearl Fractional, in a Pearl Fusion treatment gives the best result in one single session!”

Petra Adem
Jr. Territory Manager, Aesthetics
MI-Beirut



Types of Scars



Atrophic Scar



Acne Scar



Burn Scar



Keloid Scar



Hypertrophic Scar

Cutera Treatment of Acne Scars



Before



After

Cutera Training in Beirut

In order to satisfy patients' needs, Medicals International tries to give practitioners and professionals the best training and education available. Consequently, last December witnessed one of the biggest training sessions ever on Cutera Lasers with **Dr. Antonio Campo Voegli**. Dr. Campo is a famous dermatologist-venereologist from Barcelona, Spain. Though he may look rather young; however, he is one of the most experienced physicians in the laser industry. He's been using Cutera lasers for nine years, and sits on the Cutera advisory board.

The trainings took place from December 1st to December 3rd. More than 50 physicians were trained and more than 70 patients were treated in the following venues: AUBMC, CMC, Saint-George University Hospital, and G Med.

Dermatologists, vascular surgeons, and plastic surgeons were present. All these physicians were gathered to be trained on the Xeo platform, which is the most versatile aesthetic device, treating:

- Rosacea
- Skin rejuvenation and Rhinophyma
- Leg veins (from superficial to reticular)
- Solar lentiginos
- Seborreic Keratoses
- Dischromia
- Different vascular malformations: venous lakes cherry angiomas, port-wine stains
- Skin laxity etc.

All of the doctors were amazed with the ease of use of the device, speed of treatments, & surely the results.

Once again, MI proved itself to be able to treat all patients suffering from photo-aging and vascular problems, which comes aligned with its slogan: "We think of the patient first!"



Dr. Campo treating a patient using Cutera's Xeo Platform



Jennifer Bedran
Territory Manager, Aesthetics
MI - Beirut

MI Launches CUTERA in KSA

As part of the expansion of Medicals International in the Saudi Arabian market, we have recently acquired and launched the Cutera brand in Riyadh.

Cutera is an American company considered to be one of the leading aesthetic laser brands in USA. It is also ranked among the highest aesthetic laser manufacturers, worldwide. Cutera is exceptional because of the quality of its machines and the superiority of their results. Results speak for themselves, and when using Cutera for procedures such as hair removal, skin tightening, treatment of vascular lesions, skin rejuvenation, and ablative & non-ablative skin rejuvenation; patient satisfaction is guaranteed.

Cutera has had several different representative agents in KSA over the years. With Medicals International being Cutera's latest representative, we aim to do things very differently from our predecessors. At MI, we believe in developing a healthy and sustainable partnership with our customers. We do this by providing high quality products and high quality service.

"We think of the patient first" has always been our motto, and by utilizing the technical and service training of our engineers and salespeople, we aim to provide our customers with the capabilities to satisfy their patients at the highest standards.

Medicals International began its success story with Cutera in Lebanon several years ago. Since then, we have enjoyed admirable growth in Lebanon as well as Egypt. Our goal is to emulate this success in the Gulf. Starting in Riyadh, we will soon expand to all areas within KSA, and hopefully continue into other regions in the Gulf. Our vision is to lead the aesthetic market in our region and continue to deliver the absolute best to our customers – in terms of both technology and service.



Mena Atef
Jr. Territory Manger, Aesthetics
Riyadh , KSA

Maquet Launching in Lebanon

Friday, February 3rd, 2012, was a special day for Medicals International in Lebanon. It was the day we announced our partnership with Maquet Critical Care to the Lebanese medical community, and officially launched the Servo-i ventilator and the Flow-i anesthesia machine in the market.

Today, the name Maquet is synonymous with excellence in medical solutions. For over 100 years, Maquet has been a pioneer and leader in advancing life-saving technology. The designs of such technology have always been based on the needs of the end-users; the clinicians, therapists, technicians, and physicians. The philosophy is to create the most advanced machines and make them simple and convenient enough to use confidently – “make the exceptional routine”.

As a field, critical care is attended by several different types of specialties. Anesthesiologists constitute the bulk of professionals concerned with critical care in Lebanon – both in the OR and the ICU. Other specialties include intensivists, respiratory and inhalation specialists, pneumologists, and pediatricians (NICU). As such, these were the types of specialties we invited to attend the launch event; where-in the Flow-i anesthesia machine and the Servo-i ventilator were the main subjects.

The launch event was held at the Phoenicia Hotel in Beirut. We had one Servo-i machine and one Flow-i machine on display for the duration of the event. Both machines were fully functional, and early arrivals to the event had a great chance to get some brief hands-on demonstrations prior to the start of the presentations.

We began the meeting at 7 pm with a brief introduction about MI; since our audience belongs to a medical field which we have never engaged before. After that, **Mr. Salah Malek** from Maquet gave a nice presentation about the organization and its position in the critical care field. **Mr. Bernie Fowler**, the Servo-i clinical expert from Maquet, was next, and his presentation took around 45 minutes. Last but not least, **Mr. Ibrahim Faqih**, the Flow-i clinical expert from Maquet, gave his presentation for another 45 minutes. The reason for starting with the Servo-i first was because the marvelous technology of this machine is also integrated into the Flow-i – making it the most advanced anesthesia machine of its kind today. After concluding the presentations, all present enjoyed a fantastic dinner at the Mosaic Restaurant in the Phoenicia.

In total, we had the pleasure of addressing 65 doctors from all parts of the country. Despite the horrible nature of traffic, we had attendees from the North, South and Bekaa areas of Lebanon. Feedback from attendees during dinner was truly inspiring. Excitement about the new technologies and their real potential to save lives was obvious and well shared.

In conclusion, it is truly gratifying to be able to bring superior life-saving technology to our market. The launch event has shown us that the Lebanese market, and the critical care practitioners within it, need and appreciate the superb advances being made by companies such as Maquet. By adding such value to patients, particularly those who are critically ill and need special care, we are living up to our motto:

“we think of the patient first”

Mazen Fayad
Senior Sales Manager
Special Assignments
MI-Beirut



The New Visian® ICL™ with CentraFlow Technology: Simpler for you & your patients!

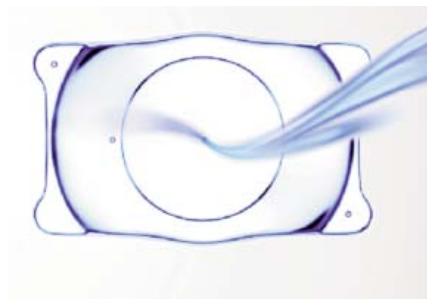
There is one quote I have heard and I keep repeating to myself and to the doctors I work with:

"we are in the business of improving the quality of life!"

When we think of it, it always makes more sense; patients come to a refractive clinic not just to have a better vision but also to be able to *"enjoy life easier and better!"*.

And since change doesn't always have to come from necessity but from an eagerness to improve, STAAR Surgical has launched the latest version of the Visian® ICL™ in the Middle East during the last WOC-MEACO congress in Abu-Dhabi, a few months after its initial launch worldwide during the ESCRS congress in Vienna.

The new Visian ICL (V4c model) with CentraFLOW™ technology utilizing the KS-AquaPORT™ (named after Prof. Kimiya Shimizu who was behind this innovation, and has been doing the clinical research on the technology since 2008) offers more comfort for the patient and a more convenient, efficient ICL experience for both the patient and the surgeon, by eliminating the need for an iridotomy/iridectomy before (or during) the procedure.



The New Visian ICL
with CentraFLOW
Technology
The newly launched
Visian ICL model

- No PIs, No Problems:

With no need for iridotomies/iridectomies you will spend less chair time with the patient in the clinic, less surgery time in the OR, and of course less risk of iritis, intra-ocular hemorrhage, elevation of IOP, corneal decompensation, and pain. With faster recovery time, the key benefit for the patient here is more COMFORT! Not to mention as well that even with a peripheral iridotomy (PI) mostly covered by the lid; about 9% of people still had visual side effects¹.

- Port Size:

With an optimal 360µm central AquaPORT, the new Visian ICL eliminates the risk of elevated IOP usually seen with blocked PIs, non-patent PIs, and/or small PIs, due to a non-reproducibility effect. You might question the risk of occlusion of the port itself... Well the answer is a near impossible probability! The largest (and most likely) particles that can occur in the eye are posterior iris pigment epithelium particles. These are conic in shape and measure 16-25µm wide, 36-55µm long. The 360µm optic port in the new Visian ICL is 6X to 10X larger than these epithelial particles. Additionally, because the iris is in front of the ICL, particles need to fall onto the optic port and accumulate, which is highly unlikely because aqueous is constantly flowing through that port.

- Visual Quality:

The visual quality is assessed with the values of the modular transfer function (MTF) which is the true measure of the resolution (image sharpness) of an imaging system (camera, video system, microscope, lens etc.). The MTF values of a Visian ICL with and without the KS-AquaPORT are almost identical (0.51 vs. 0.53). Only with a central port size of 450µm and above can visual disturbances (glare & halos) occur.

Therefore, the KS-AquaPORT in the new Visian ICL is too large to be blocked and too small to affect the quality of vision.

- Fluid Dynamics:

A recent study² suggested that the new Visian ICL has improved the circulation of aqueous humor to the anterior surface of the crystalline lens, which is thought to prevent secondary cataracts. More research is needed to prove that the new Visian ICL with the KS-AquaPORT can lead to a better distribution of nutrients and creates less turbidity around the crystalline lens; earlier research has been very promising in this area³.

¹ *J Glaucoma*. 2005 Oct;14(5):364-7.

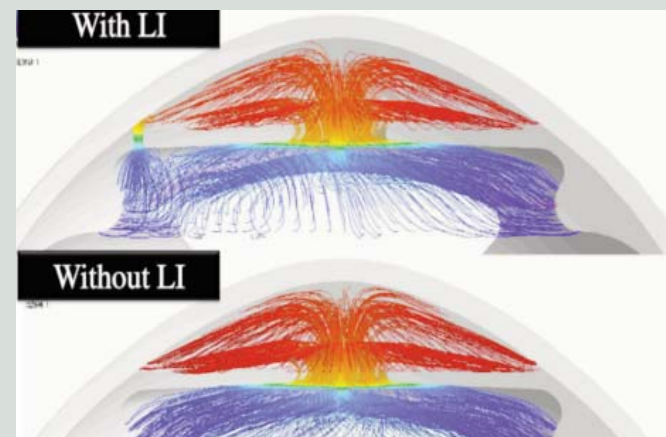
Spaeth GL, Idowu O, Seligsohn A, Henderer J, Fonatanarosa J, Modi A, Nallamshetty HS, Chieh J, Haim L, Steinmann WC, Moster M.

² *Graefes Arch Clin Exp Ophthalmol*. 2012 Jun;250(6):935-9. Epub 2011 Nov 1.

Kawamorita T, Uozato H, Shimizu K.

³ *Graefes Arch Clin Exp Ophthalmol*. 2008 May; 246(5): 719-728.

Tetsu Shiratani, Kimiya Shimizu, Kunitoshi Fujisawa, Shigekazu Uga, Koichi Nagano, and Yuuki Murakami



The above picture shows clearly a more uniform fluid movement pattern with the KS-AquaPORT™ only than with the KS-AquaPORT™ and a peripheral PI.³

STAAR Surgical is happy to announce the availability of the New Visian ICL with CentraFLOW technology in the Middle East through our valued partner MEDICALS INTERNATIONAL.

The easier alternative for correcting myopia and myopic astigmatism will provide doctors throughout the region with life improving options to their patients.

The business of changing lives is an ongoing challenge and with the easy made easier...the options are 'CLEARLY MORE SIMPLE'!

Elie K. El Moujabber
STAAR Regional Product Specialist, Middle East

EyeCubed; ELLEX

ELLEX the leading brand of lasers and imaging systems recently released its state of art, the Eye Cubed V4.

The Eye Cubed V4 is the most up to date and newest generation in Ultrasound technology. Eyecubed V4 has many premium features available in one machine. The robust system boasts a 25 frames per second image acquisition rate with a fast UBM 40 MHz probe.

With the introduction of the Eye Cubed's new 40MHz Ultrasound Biological Microscope (UBM) mode, practitioners are able to easily analyze the various anterior segment structures of the eye with a very precise and high level of resolution. The level of detail with the newest model Eye Cubed V4 allows the surgeon to offer the best diagnosis.

The Eye Cubed was first introduced in the Kingdom of Saudi Arabia in KFMC (King Fahed Medical City). The surgeons and staff studied, reviewed, analyzed and evaluated the robust ultrasound. Thereafter, a short evaluation period followed, and the hospital procured the technology to enhance the hospital's diagnostic offering.

The second unit was placed at KKESH. Dr. Jonathan Song, Chief of Pediatric at Johns Hopkins and Chief of Pediatrics at KKESH purchased three EyeCubed in Los Angeles, CA when he was Chief of Pediatrics at Children's Hospital Los Angeles. The doctors in KKESH admire the well designed and useful EyeCubed because the technology has the ability to provide the highest resolution imaging in order to visualize the finest details in the eye. The most intricate specifics are esteemed by all surgeons, including glaucoma, pediatric, anterior, posterior and refractive surgeons.

Every surgeon has a different need and every need requires imaging details.

“EyeCubed is a must technology”

The elegant features of the Eyecubed are listed below:

The new 40MHz UBM mode allows existing Eye Cubed™ users to augment their diagnostic capabilities with:

- Highest resolution to visualize even the finest structures and pathologies
 - o Premium IOL/ICL sizing
 - o Subluxed IOLs that require repositioning
 - o Corneal pathology and grafts
 - o Iridociliary body lesions such as cysts and malignant tumors
 - o Glaucoma, including narrow angle with measurement and iris bombe

The elegant technology enables the surgeons to “see” hidden pathologies not easily detectable, make a comfortable diagnosis, and treat the patients.

- Full Anterior Segment Resoluiton is phenomenal (wide-field probe)
 - o Cornea
 - o Iris
 - o Ciliary body
 - o Crystalline and intraocular lens
 - o Sulcus-to-sulcus measurement for accurate ICL sizing
 - o Sngle for potential angle closure
 - o Possible YAG laser iridotomy
- New ClearScan immersion bags: Ease of use, Fast examination, Enhanced patient comfort

Optimized Diagnostic and Measurement Capabilities for:

- Glaucoma: narrow angle, iris plateau, iris bombe, filtration bulb, iridectomy and iridotomy
- Refractive: premium IOL/ICL sizing, sulcus to sulcus measurements
- Cataract: subluxed and tilted IOSs, zonules
- Other anterior segment indications: corneal pathologies and grafts; iridociliary body lesions such as cysts and malignant tumors; etc.

The Eye Cubed's image clarity and flexible measurements allow for thorough pre- and post-op assessment of ocular anatomy. This is an essential component in optimizing premium IOL outcomes.

- Evaluation and measurement of sulcus diameter
- Analysis and measurement of angle
- Measurement of lens thickness

Technical specs of the 40MHz probe

- Image acquisition rate – 12.5 frames per second
- Axial resolution - <0.01mm
- Lateral resolution - <0.02mm
- Scanning angle - ≥30 degrees
- Image depth: 12.5 mm
- Image width at focal zone: 15-17 mm



Eyecubed probe elegantly designed for ease of use



Intuitive and ease of use to diagnose and “see” details

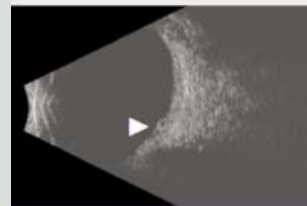
CASE STUDY THREE: 10 MHz B-Scan | Macular Pathology



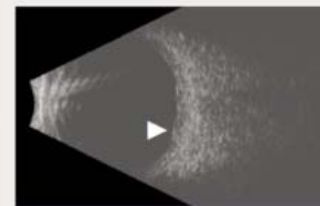
CME caused by Vitreous Macular Traction Syndrome (Longitudinal Macula View) Posterior hyaloid inserts at nerve, fovea and equator



CME with no Vitreous Traction (Longitudinal Macula View) Extensive edema altering globe contour; note optic cup

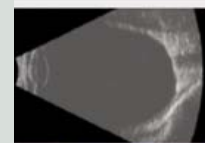


CRVO with Double Macular Cyst (Longitudinal Macula View) Central Retinal Vein Occlusion



CRVO with Double Macular Cyst (Vertical Macula View) Central Retinal Vein Occlusion

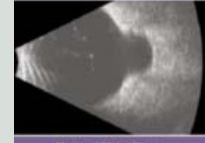
CASE STUDY FOUR: 10 MHz A-Scan and B-Scan | Staphyloma



40+ mm Eye (Horizontal Axial View)



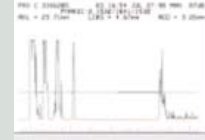
32+ mm Eye with Disk Edema (Method 2) (Horizontal Axial View)



Unusual Globe Shape (Horizontal Posterior View)



29+ mm Eye (Method 2) (Horizontal Axial View)



Case Studies in Globe Contour

Axial Length Measurement of Staphyloma: Method 1

1. Perform immersion biometry, maximize double-peaked cornea and lens echoes. Document measurements of ACD at 1532 m/s for Aqueous and Lens Thickness @ 1641 m/s for crystalline lens.
2. Perform horizontal, axial B-Scan and center posterior lens and macula - Measure from Lens to Macula using velocity of 1532 m/s for Vitreous.
3. Add ACD and Lens from A-scan to Vitreous length from B-Scan to obtain Axial Length.
4. Repeat B-Scan and Vitreous measurement for added accuracy.

Axial Length Measurement of Staphyloma: Method 2

1. Perform immersion biometry, maximize double-peaked cornea, lens, and retinal echoes.
2. On the open globe using opaque Tear Gel, perform horizontal, axial B-Scan and center double echo from cornea, posterior lens, and macula region. Measure from Anterior Cornea to Macula using velocity of 1550 m/s for an average velocity measurement.
3. Compare Axial Length measurements between the A-Scan and B-Scan.
4. Repeat B-Scan and measurement for added accuracy.

The Eye Cubed V4; The New Generation Of Ophthalmic Ultrasound

Market Overview

Ellex which is one of the top market players in the market of high end users who are mainly focused on the quality of the image and the applications that the device can provide, offers the Eye Cubed V4.

The Eye Cubed V3

The previous version, Eye Cubed V3, offers high signal to noise ratio that provides high quality images, creates long movies with high sampling rate of 25 frames per second, standardized A scan, and full function biometry. However, some of the drawbacks were:

- 1- Poor assembly of the machine, (mainly the cart and the LCD)
- 2- Poor patient report format and the inability to save it
- 3- Week biometry for long eyes, silicon oil filled eyes, or post Lasik cases
- 4- Limitation in probes frequency to 20 MHZ while some competitors have 40 and 50 MHZ for UBM

Why Eye Cubed V4?

1. Industry's fastest sampling rate, 25 frames per second
2. V4 displays 5 times more information than the V3, although both of them capture the same scan information
3. Highest signal to noise ratio to visualize the finest ocular details including blood and inflammatory cells
4. Advanced movie technology to improve diagnostic process, captures up to 10 second movies
5. Modern user interface
6. Several patient report templates with the ability to archive it
7. Intuitive visual selection of probe orientation
8. Modern cart with better assembly of the LCD to the cart
9. New ultrasound 40 MHZ probe for UBM applications
10. Ease of use of the 40 MHZ probe (no scleral shell required)
11. 40 MHZ probe gives a wide field of view for the anterior segment
12. Observe the anterior segment more clearly than ever before, without compromising image depth and width!
13. Improved biometry with IOL power calculations and analysis: Holladay-I, SRK-T, Haigis, and Hoffer-Q

- ELLEX is the technology's leader in the USA and present in all major universities John Hopkins, Iowa City, Harvard...

- Eye Cubed has a great resolution and signal to noise ratio with 25 frames per second in B Scan for retinal imaging. Eye Cubed is the only system able to show vascular activities in posterior pole lesions

- Eye Cubed 40MHz is extremely easy to use (Scleral shell not required/2 minutes examination technique) and allows sulcus to sulcus measurements with great resolution

The Ellex Quick Reference Product Guide (Ultrasound section) further expands on the detailed positioning, key features, key specs, and key competitors of the Eye Cubed, it also includes Powerpoint presentations on:

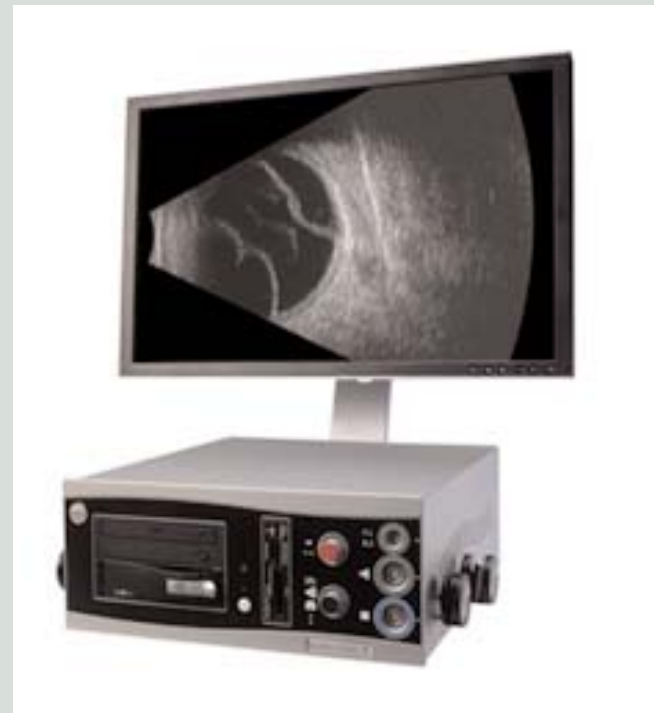
- The Eye Cubed V4 sales arguments
- Competition in the ultrasound market
- The new Ellex UBM wide-filed 40MHz probe, showing the quality of the images obtained with this new probe

A selection of clinical articles attesting to the imaging quality and clinical added-value of the Eye Cubed ultrasound system.

Basically, what needs to be emphasized on when selling the Eye Cubed is that:

ELLEX manufactures its own probes, so the company has continuous control on quality in the manufacturing process of our probes § ELLEX have the fastest image acquisition rate for posterior segment imaging (25 frames/second), when competitors have 13 frames/second max. This feature is extremely helpful when analyzing membrane behavior (to differentiate vitreous detachment from retinal detachment for instance) § ELLEX used to be the posterior segment specialists but they can now also position themselves as the anterior segment experts with their new UBM wide-field 40MHz probe – ELLEX offer a complete high-end ultrasound solution in one single system (all University Hospitals in the US are using the Eye Cubed).

If you visit the independent educational website on ophthalmic echography – Ophthalmic Edge – at <http://www.ophtalmicedge.org/introduction-dr-yale-fisher-md>, you will notice that all pictures and videos were made with the Eye Cubed new advanced software is easy to use and customizable to the needs of the customer. Please refer to the Eye Cubed PPT presentation and QRPQ document for details on data management, measurement capabilities, etc.



Mohamad El Helou
Asst. Sales Manager, Ophthalmology
MI-KSA

MI Team Discovering Tannourine

On the 22nd of November 2011, we, Beirut and Offshore team members, organized a trip to Tannourine to take part in challenging sports activities involving Caving, Abseiling and Via Ferrata. The main objective was to have fun, strengthen the relationship between each other and develop our team spirit.

Our journey started early in the morning, especially that the program was overloaded and every minute counted. So, we gathered for a quick breakfast and then headed directly to our destination.

Abseiling was the first activity on our to-do list that day, so we started with it as soon as we arrived. One at a time we started rappelling down a 50 meter rocky mountain wall, while enjoying the view of one of the most beautiful waterfalls running behind us. We were so strong and committed to complete the challenge without hesitation and we eventually did.

Afterwards, we went to the village to have lunch. We ate, laughed and had a great time. After we finished, we rested for a little while and headed over to Akoura for the second activity which was VIA Ferrata. We hiked the mountain route using cables, stemples, ladders, and bridges while enjoying the most amazing natural sceneries of Lebanon. It was a hard challenge for us since this type of activity required a lot of physical endurance but that did not stop us. Instead, we were helping each other using motivation and encouragement.

After 4 hours of hiking, we rested a bit and proceeded to the last activity which was caving. This one was a really unique and exciting adventure that we all enjoyed so much, especially that we had the chance to explore one of the most fascinating caves in the region, the Roueiss cave, in which we had the opportunity to celebrate the birthday of our colleague Benny in a special way.

At this point we were perfectly aware that our journey had come to an end, although we wished differently. So, we headed back to our cars, shared our experiences and returned home after a long day.

The quality time we had together as a team was priceless. The bonds between us got stronger and we lived a really delightful experience. This was a day to remember indeed.

For the best team ever!

Gilbert Matar,
Sales Support Administrator



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We think of the patient first